

Are You Getting Bad Vibes from Your Tools

WHAT'S AT STAKE?

Millions of workers in North America use vibrating tools, such as drills, jackhammers, grinders or chainsaws. And many of these workers are at risk of developing hand-arm vibration syndrome (HAVS), a condition that affects the circulatory, nervous and musculoskeletal systems.

WHAT'S THE DANGER?

Regular and frequent exposure to vibration from tools can permanently damage your fingers and hands. At first there's a whitening of the fingertips, when the blood vessels collapse. As the skin and muscle tissue don't get the oxygen they need, they eventually die. Early symptoms of HAVS include pain, numbness, tingling and loss of dexterity in the hand. Symptoms can become so severe that the worker is forced to change trades. If not addressed, HAVS can lead to the permanent loss of the use of hands.

EXAMPLE

George, a former mechanic technician, was forced into early retirement due to tissue damage to his hands. Not only did HAVS affect his ability to work, it affected his day-to-day living. Unable to grip with his fingers and thumbs, even the most basic tasks, such as writing, fishing or just holding a cup of coffee, are difficult and painful. It's even worse in the cold months.

HOW TO PROTECT YOURSELF

Some factors can increase your risk of HAVS, including:

- The tool's vibration levels,
- How long you use the tool each day and for how many months or years you've used it,
- How strongly you grip the tool, and
- How much force you apply to the tool?

Cold conditions and tobacco smoke can also reduce the blood supply to your hands and fingers, increasing your risk of developing HAVS.

These tips can help you minimize the effects of vibration from tools:

- Choose tools that require minimal force to operate or that include anti-vibration or shock-absorbing devices.
- Maintain tools so they will run as smoothly as possible.
- Use handle coatings that suppress vibration, but be sure that the coating doesn't increase the size of the handle and require a tighter grip.
- Keep a loose grip on the tool and use only as much force as is necessary. Let the tool do the work. The stronger the grip, the more vibration is transferred to your body.
- Reduce the tool speed if possible.
- Keep your body and hands warm and dry. Direct air tool exhaust away from the hands to prevent chilling.
- Use vibration-dampening gloves. Be sure they fit properly and don't require you to grip more tightly.
- Give your body tissues a chance to recover. Take frequent breaks and change your position often as well to help redistribute the force of the vibration.
- Don't smoke. It makes you more susceptible to HAVS by constricting the blood vessels

FINAL WORD

Vibration from tools and equipment can cause permanent damage to your body. Learn to recognize and address early symptoms of vibration exposure to prevent long-term problems later.

QUIZ

1. Hand-arm vibration syndrome (HAVS) does not cause pain.
 - o True
 - o False
2. An early symptom of regular and frequent exposure to vibration from tools is a whitening of the fingertips.
 - o True
 - o False
3. Your risk of developing HAVS increases with:
 - A. The level of vibration created by the tool
 - B. The number of hours of daily use and cumulative use over months or years.
 - C. The force with which the tool is gripped
 - D. The force applied to the tool during tasks
 - E. All of the above
4. Smoking and exposure to cold working conditions are factors that increase a worker's risk for developing HAVS.
 - o True
 - o False
5. There are no devices or products available to reduce the level of hand/ arm vibration a worker experience.
 - o True
 - o False

WHAT WOULD YOU DO?

After years of using vibrating tools on the job you are starting to notice some aches and pains in your hands. At first you put it down to your age. Maybe it's the beginning of arthritis or possibly a circulation problem. But when you mention the pain to a co-worker, he suggests you might have hand-arm vibration syndrome. Should you ignore the problem and hope it goes away? Talk to your supervisor about the problem? Mention it at your next doctor's appointment?

BEFORE THE TALK - TIPS

1. Compile an inventory of the various vibrating tools used in your workplace and be prepared to review with your workers the proper operation and maintenance practices for these tools.
2. This is also a good time to discuss the procedures for properly (and promptly) reporting poorly functioning tools.
3. The best way to protect your workers is to reduce the amount of vibration produced by the tool. Do some research to see what vibration isolators or damping techniques are available to offer the most effective protection. Be prepared to discuss these options at your meeting.
4. Be prepared to discuss the best gloves available for working with vibrating tools.
5. Vibrating tools are usually also very loud. Review with your workers the hearing protection required when using vibrating tools.
6. Work tasks should be arranged so that vibrating and non-vibrating tools are used alternately. Discuss some options with your workers.

AFTER THE TALK- *CHECKLIST*

PROVIDED FOLLOW-UP TO WORKERS THAT DID

POORLY ON THE QUIZ

NAME: _____

DATE: _____

OBSERVED WORKERS

TASK(S): _____

DATE:

REFRESHER TRAINING

TOPIC(S): _____

DATE:

OTHER (DESCRIBE):

MEETING DATE: _____

LOCATION: _____

NOTES

ANSWERS:

ATTENDANCE

INSTRUCTOR: _____ **DATE:** _____

SAFETY TALK: _____